

# Warmup

• Pg 646 # 20, 28, 36

• Systems – solve by graphing

•  $y = 2x - 3$   $y = mx + b$

•  $y = -3x + 2$   $y = mx + b$

$$\begin{array}{r} -3x + 2 = 2x - 3 \\ +6x \quad +3x \end{array}$$

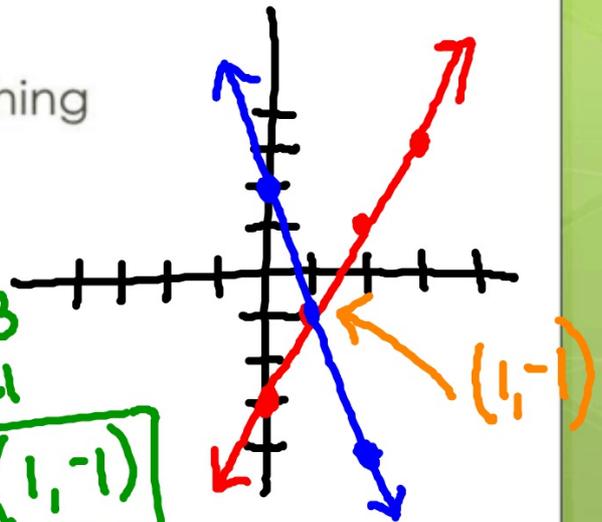
$$2 = 5x - 3$$

$$5 = 5x \rightarrow x = 1$$

$$y = 2(1) - 3$$

$$y = -1$$

$$(1, -1)$$





The slide features a green background with a faint, repeating pattern of hexagons and vertical lines. A white rectangular area on the right side contains the text. At the top of this white area is a solid brown rectangle. Below it, the word "Percents" is written in a large, green, sans-serif font. Underneath "Percents" is the text "Section 11.2" in a smaller, black, sans-serif font. A thin, horizontal green line is positioned at the bottom of the white content box.

# Percents

Section 11.2

## Percents

- Used to describe a portion of a total

$$a = pb$$

- Where:
  - a is the new amount
  - p is the percent
  - b is the base amount (original)

## Solving with Percents

- Replace **is** with and equal sign
- Replace **of** with a multiplication sign
- Solve for the variable

## Examples

1. What is 30% of 50

$$x = .30(50) \Rightarrow x = 15$$

2. What is 15% of 45

$$x = .15 \cdot 45 \Rightarrow x = 6.75$$

3. What is 81% of 519

$$x = .81 \cdot (519) \Rightarrow x = 420.39$$

## Examples

4. 14 is 25% of what number

$$14 = .25 \cdot (x) \quad x = 56$$

5. 71 is 31% of what number

$$71 = .31x \quad x = 229.03$$

6. 26 is 40% of what number

$$26 = .4 \cdot x \quad x = 65$$

## Examples

7. 48 is what percent of 160

$$48 = x \cdot 160 \quad x = .30 \quad 30\%$$

8. 13 is what percent of 52

$$13 = x \cdot 52 \quad x = .25 \quad 25\%$$

9. 135 is what percent of 27

$$135 = x \cdot 27 \quad x = 5 \quad 500\%$$

## Classwork

- Pg 652 # 1-9, 31-35 together
- Pg 653 # 10-30, 36-39

## Homework:

- Pg655 # 63-71
- Quiz 11.1-11.2 tomorrow
- Finish classwork